This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

dehydrogenating element and a substrate that comprises comprising at least one hydrowhereby said silica-alumina has having the following characteristics:

-- a silica content by weight of a silica content by weight

- a sodium content that je less than 300 ppm by weight,
- a total pore volume of between 0.5 and 1.2 ml/g,
- the a volume of mesopores with a diameter of between 40-150 Å, and a mean diameter of between 80-120 Å represents representing 30-80% of the total pore volume,
- the a volume of macropores with a diameter that is greater than 500 Å represents representing 20-80% of the total pore volume, and
- a specific surface area that is greater than 200 m<sup>2</sup>/g.

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Claim 2 (currently amended): A catalyst according to claim 1, in which the silica-alumina comprises AlvI (octahedral) species and AlIV (tetrahedral) species, whereby wherein the proportion of the tetrahedral Al<sub>IV</sub> is between 30 and 40%.

Claim 3 (currently amended): A catalyst according to claim 1, in which wherein the silicaalumina comprises 30-50% of Q2 species, wherein an Si atom is linked to two Si or Al atoms and to two OH groups and also comprises 10-30% of Q<sup>3</sup> species wherein an Si atom is linked to three Si or Al atoms and to an OH group.

Claim 4 (currently amended): A catalyst according to claim 1, that contains further containing at least one of boron and silicon.

Claim 5 (currently amended): A catalyst according to claim 1, that contains further containing at

the group consession of the containing at
least one element that is selected from among groups VIIA, VIIB, and VB.

Claim 6 (currently amended): A catalyst according to claim 1, in which wherein the substrate consists of said silica-alumina.

Claim 7 (currently amended): A catalyst according to claim 1, whose wherein the substrate further comprises 1-40% by weight of binder.

Claim 8 (currently amended): A catalyst according to claim 7, in which wherein the substrate results from the comprises a mixture of said silica-alumina and at least one binder selected from the group consisting of silica, alumina, clays, titanium oxide, boron oxide and zirconium.

Claim 9 (currently amended): A catalyst according to claim 1, that has <u>having</u> undergone a sulfurization treatment.

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Claim 10 (currently amended): A process for comprising hydrocracking with a catalyst of the comprising hydrocracking with a catalyst of claim 1, at a temperature that is greater than 200°C, a pressure that its greater than

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0.1 Mpa, with an amount of hydrogen of at least 50 l/l of feedstock, and with an hourly volumetric flow rate of 0.1 to 20 volumes of feedstock per volume of catalyst and per hour.

, wherein said

Claim 11 (currently amended): A process according to claim 10 for the hydrocracking of feedstocks that are selected from the group that is formed by consisting of kerosenes, gas oils, vacuum gas oils, atmospheric residues, vacuum residues, atmospheric distillates, vacuum distillates, heavy fuels, oils, waxes, paraffins, waste oils, deasphalted residues, deasphalted crudes, the feedstocks that are obtained from thermal conversion or catalytic conversion processes, whereby the said feedstocks contain containing less than 30% by weight of paraffins.

Claim 12 (previously presented): A process according to claim 10, wherein the feedstock is first hydrotreated.

Claim 13 (currently amended): A process according to claim 10, in which wherein the hydrocracking is carried out in two stages with intermediate separation, whereby the said catalyst e to see the said catalyst is used being incorporated in at least one stage.

Claim 14 (currently amended): A process according to claim 10, in which wherein the feedstock contains less than 25% by weight of paraffin.

Claim 15 (previously presented): A catalyst according to claim 1, wherein the volume of macropores in said silica-alumina is 20-70% of the total pore volume.

Claim 16 (currently amended): A catalyst according to claim 4 that contains further containing at least one element that is selected from among groups VIIA, VIIB, and VB.

Claim 17 (currently amended): A catalyst according to claim 5, in which wherein the substrate consists of said silica-alumina.

Claim 18 (previously presented): A catalyst according to claim 5, whose said substrate comprises comprising 1-40% by weight of binder.

Claim 19 (currently amended): A catalyst according to claim 18, that has having undergone a sulfurization treatment.

Claim 20 (previously presented): A catalyst according to claim 19, wherein the volume of macropores in said silica-alumina is 20-70% of the total pore volume.

Claim 21 (new): A catalyst according to claim 1, wherein the substrate consists essentially of said silica-alumina.

Claim 22 (new): A catalyst according to claim 9, wherein the substrate consists essentially of said silica-alumina.

said silica-alumina.

O Claim 23 (new): A process comprising hydrocracking with a catalyst according to claim 21, at a temperature that is greater than 200°C, a pressure that is greater than 0.1 Mpa, with an amount of hydrogen of at least 50 1/1 of feedstock, and with an hourly volumetric flow rate of 0.1 to 20 volumes of feedstock per volume of catalyst and per hour.

of feedstocks

Claim 24 (new): A process comprising hydrocracking with a catalyst according to claim 22, at a temperature that is greater than 200°C, a pressure that is greater than 0.1 Mpa, with an amount of hydrogen of at least 50 l/l of feedstock, and with an hourly volumetric flow rate of 0.1 to 20 volumes of feedstock per volume of catalyst and per hour.